

What is claimed is:

1. A gear-type key switch of a keyboard device, comprising:
 - a key top;
 - a holder member;
 - four gears;
 - a spring member for providing elastic return force for the key top;
 - a film circuit board; and
 - a supporting plate; and wherein

the spring member and the holder member are located above the supporting plate and below the key top, the film circuit board is located between the supporting plate and the spring member; and wherein

the holder member have four pairs of shafts disposed thereon, said four gears are respectively rotatably assembled to the four pairs of shafts, the key top forms at least four rack supporting members on a bottom thereof; wherein

the at least four rack supporting members are respectively parallel to corresponding gears and engage with corresponding gears to provide the upward and downward movement for the key switch.

2. The gear-type key switch of the keyboard device as claimed in claim 1, wherein the four gears form a quadrangle shape.

3. A gear-type key switch of a keyboard device, comprising:

- a key top;
- a holder member;
- three gears;
- a spring member for providing elastic return force to the key top;

a film circuit board; and

a supporting plate; and wherein

the spring member and the holder member are above the supporting plate and below the key top, the film circuit board is located between the supporting plate and the spring member; and wherein

the holder member have three pairs of shafts disposed thereon, said three gears are respectively rotatably assembled to the three pairs of shafts, the key top forms at least three rack supporting members on a bottom thereof; wherein

the at least three rack supporting members are respectively parallel to corresponding gears and engage with corresponding gears to provide the upward and downward movement for the key top.

4. The gear-type key switch of the keyboard device as claimed in claim 3, wherein the three gears form a triangular shape.

5. The gear-type key switch of the keyboard device as claimed in claim 1 or 3, wherein each rack supporting member of the key top forms a restrictive barb on a bottom edge.

6. The gear-type key switch of the keyboard device as claimed in claim 1 or 3, wherein each rack supporting member is capable of being divided into at least two racks.